APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,750	11/25/2003	Atsushi Watanabe	392.1842	2777

			EXAMINER
21171	7590	08/10/2006	PHAM, THOMAS K

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ART UNIT	PAPER NUMBER
2121	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 June 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-15,18 and 19</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>6-8 and 11</u> is/are allowed.

6)☒ Claim(s) <u>1-5,9,10,12-15,18 and 19</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Response to Amendment

1.   This is in response to the amendment filed 06/06/2006.

2.   Claims 6-8 and 11 are allowed.

3.   Claims 16 and 17 are cancelled.

4.   Applicant's arguments, with respect to the amended claims 1-5, 9-10, 12-15, 18 and 19,

have been considered but they are not persuasive.

Quotations of U.S. Code Title 35

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim Rejections - 35 USC § 103

7.   Claims 1-5, 9-10, 12-15, 18 and 19 are rejected under 35 U.S.C. 102(e) as being

anticipated by U.S. Patent No. 6,678,714 ("Olapurath") in view of U.S. Patent No. 6,038,585

("Togawa").

Regarding claim 1

Olapurath teaches a production cell comprising

- a plurality of work performing elements for performing work (see FIG. 1 and col. 2 lines

    57-62, "Fulfiller 1060"), and an information processing device for commanding work

    tasks (see FIG. 1 "task server 1010" and col. 3 lines 4-7), connected to the respective

    work performing elements by communications means (see FIG. 1 "communication link

    1020" and col. 2 lines 63-67);

- wherein said information processing device outputs a command consisting of a set of task

    units assigned with an execution sequence, to each of the work performing elements (see

    col. 3 lines 25-30); and

- the work performing elements each store operating programs for respectively executing

    one or more task units (see col. 4 lines 50-52), and perform work by executing the

    operating programs in the order of the execution sequence, on the basis of the set of task

    units with an assigned execution sequence output by said information processing device

    (see col. 4 lines 55-67).

Olapurath does not specifically teach the information processing device receiving notifications

for executability of specific task units from the work performing elements, and based on the

received notifications, selecting one of the work performing elements to execute the specific task unit.

However, Togawa teaches an autonomous distributed instruction book control device for executing a sequential processing procedures and instruction data contained within an instruction book including when a request for executability is made from an instruction book control unit 2 and instruction processing units (i.e. 7, 7a, and 7b), instruction book management unit receiving the notifications by way of instruction book (see FIG. 1, Col. 14 lines 60-63, Col. 15 lines 1-4). The instruction book management unit then checks the environment conditions and selects a free processor (i.e. instruction processing units 7, 7a and 7b) that meet the operating environment conditions to execute the instruction book (see Col. 15 lines 8-15) for the purpose of executing a target process from a plurality of target processes using a processing unit that is suited to handle the particular target process (see Col. 1.lines 55-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the control device of Togawa with the system of Olapurath because it would provide for the purpose of executing a target process from a plurality of target processes using a processing unit that is suited to handle the particular target process.

Regarding claim 12

Olapurath teaches a production system, comprising:

- an information processing device outputting a work command as a set of task units (see col. 3 lines 25-30); and

- work performing elements in communication with the information processing device (see FIG. 1, "task server 1010 is in communication with fulfillers 1060") and receiving the work command from the information processing device (see Col. 2 lines 59-62).

Olapurath does not specifically disclose each of the work performing elements making a determination as to whether the work performing element can execute a specific one of the task units and sending a notification to the information processing device that specific task unit is executable if the task unit is executable by the work performing element; wherein the information processing device selects one of the work performing elements having sent a notification that the task unit is executable.

However, Togawa teaches an autonomous distributed instruction book control device for executing a sequential processing procedures and instruction data contained within an instruction book which includes an instruction book processing unit (work performing element) making a determination of which of the processes of the tasks is to be executed next (see Col. 2 lines 51-54), when a request for executability is made from an instruction book control unit 2 and instruction processing units (i.e. 7, 7a, and 7b), instruction book management unit receiving the notifications by way of instruction book (see FIG. 1; Col. 14 lines 60-63, Col. 15 lines 1-4). The instruction book management unit then checks the environment conditions and selects a free processor (i.e. instruction processing units 7, 7a and 7b) that meet the operating environment conditions to execute the instruction book (see Col. 15 lines 8-15) for the purpose of executing a target process from a plurality of target processes using a processing unit that is suited to handle the particular target process (see Col. 1 lines 55-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate the control device of Togawa with the system of Olapurath because it

would provide for the purpose of executing a target process from a plurality of target processes

using a processing unit that is suited to handle the particular target process.

Regarding claim 15

Olapurath teaches a method of executing a sequence of task units, comprising:

- outputting a work command as a set of task units from an information processing device

  to a plurality of work performing elements (see col. 3 lines 25-30);

- receiving, at the work performing elements, the work command from the information

  processing device (see col. 3 lines 25-30); and

Olapurath does not specifically teach determining, at each of the work performing elements,

whether the specific work performing element can execute at least one of the task units that is to

be executed next; notifying the information processing device that at least one of the task units

can be executed if the work performing element determines that a specific one of the task units

can be executed by the work performing element; and selecting, at the information processing

device, one of the work performing elements having sent a notification that the task unit is

execute the specific task unit.

However, Togawa teaches an autonomous distributed instruction book control device for

executing a sequential processing procedures and instruction data contained within an instruction

book which includes an instruction book processing unit (work performing element) making a

determination of which of the processes of the tasks is to be executed next (see Col. 2 lines 51-

54), when a request for executability is made from an instruction book control unit 2 and

instruction processing units (i.e. 7, 7a, and 7b), instruction book management unit receiving the

notifications by way of instruction book (see FIG. 1, Col. 14 lines 60-63, Col. 15 lines 1-4). The

instruction book management unit then checks the environment conditions and selects a free

processor (i.e. instruction processing units 7, 7a and 7b) that meet the operating environment

conditions to execute the instruction book (see Col. 15 lines 8-15) for the purpose of executing a

target process from a plurality of target processes using a processing unit that is suited to handle

the particular target process (see Col. 1 lines 55-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate the control device of Togawa with the system of Olapurath because it

would provide for the purpose of executing a target process from a plurality of target processes

using a processing unit that is suited to handle the particular target process.

Regarding claim 2

Olapurath teaches wherein the management of the task unit to be executed next is performed by

the information processing device, each time the work in one task unit is completed (see col. 7

lines 43-53).

Regarding claim 3

Olapurath teaches wherein the management of the task unit to be executed next is performed by

communications between the work performing elements, each time the work in one task unit is

completed (see col. 4 line 66 to col. 5 line 4).

Regarding claim 4

Olapurath teaches comprising two or more work performing elements capable of performing the work of the same task unit, wherein the work performing element to carry out the work of said same task unit is determined by said information processing device (see col. 7 lines 14-19).

Regarding claim 5

Olapurath teaches two or more work performing elements capable of performing the work of the same task unit, wherein the work performing element to carry out the work of said same task unit is determined by communications between the work performing elements, in accordance with a previously determined priority order (see col. 7 lines 46-53).

Regarding claim 9

Olapurath teaches a new work command can be received and work tasks corresponding to said new work command can be executed, while executing work tasks corresponding to another work command already received (see col. 7 line 66 to col. 8 line 5).

Regarding claim 10

Olapurath teaches the types of said work commands are determined by the types of workpiece that are to be processed (see col. 10 lines 33-60).

Regarding claim 13

Togawa teaches the instruction book control unit (work performing element) notifying the information processing device that execution of one of the task units is possible sends a task efficiency value of the executable task unit (see Col. 9 lines 24-35).

Regarding claim 14

Togawa teaches wherein the information processing device selects one of the work performing elements having sent a notification that the task unit is executable and sends an execution

command to the selected work performing element, upon which the selected work performing element executes the task unit base on receipt of the notifications that task units are executable and the task efficiency values from the work performing elements (see Col. 6 lines 43-51).

Regarding claim 18

Togawa teaches receiving, prior to the selection of one of the work performing elements, a task efficiency value for the specified task unit from each of the work performing elements capable of executing the specified task unit (see Col. 9 lines 24-35); and selecting, based on the task efficiency value, one of the work performing elements to execute the specified task unit (see Col. 6 lines 43-51).

Regarding claim 19

Togawa teaches receiving, after execution of a specified task unit, notification that the specified task unit is executed (see Col. 13 lines 58-61); and outputting a successive execution command to a selected work performing element to execute the next task unit in a task unit execution sequence (see Col. 13 lines 61-64).

Response to Arguments

In the remarks the applicants argue that cited reference failed to teach:

I)   "the processing units send notifications of executability of specific tasks to the information processing device and then the information processing device selects one of the work performing elements to execute the specific task unit"

II)   the motivation to combine the prior arts.

In response to applicants' argument,

I)   Prior art Togawa (USPN 6,038,585) discloses an autonomous distributed instruction book control device for executing a sequential processing procedures and instruction data contained within an instruction book including when a request for executability is made from an instruction book control unit and instruction processing units (see FIG. 1, control unit 2 and instruction processing units 7, 7a, and 7b). By way of instruction book 8, an instruction book management unit 3 receiving the notifications for executability sent by the processing units 7, 7a and/or 7b (see FIG. 1, Col. 14 lines 60-63, Col. 15 lines 1-4). The instruction book management unit 3 then checks environment conditions and selects a free processor within the processing units 7, 7a and/or 7b that meets the operating environment conditions to execute the instruction book (see Col. 15 lines 8-15). Although not directly, it is clear that the instruction processing units are sending the notification of executability to be received by the instruction book management unit 3 so that arrangement can be made to execute the instruction book by one of the "free processors" within a instruction processing unit. Thus, the limitations are taught by the reference.

II)   In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Olapurath (USPN 6,678,714) is a task management system for processing tasks and

Togawa (USPN 6,038,585) is also task processing system for processing tasks within an instruction book. The combination of Olapurath and Togawa provides a strong motivation to combine because at least they are related in the same technical field and for solving the same problem (i.e. tasks processing). From the concepts and advantages of the Togawa reference, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the task processing features of Togawa with the task management system of Olapurath which enable the Olaplurath to execute a target process from a plurality of target processes using a processing unit that is suited to handle the particular target process.

Conclusion

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to examiner *Thomas Pham*; whose telephone number is (571) 272-

3689, Monday to Thursday from 6:30 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony*

Knight at (571) 272-3687.

Thomas Pham
Patent Examiner

August 7, 2006